AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-41. (Canceled)

42. (Currently Amended) A ~~process~~ method for depositing a diamond-like carbon film comprising the steps of:

~~providing first and second electrodes opposed to each other in a reaction chamber, said first electrode having at least one inlet having an opening elongated in a first direction;~~

~~introducing an etching gas through said at least one inlet into said reaction chamber;~~

~~generating a plasma of said etching gas by applying a voltage between said first and second electrodes wherein at each said at least one inlet said plasma extends from the first electrode toward the second electrode and at each said at least one inlet a cross section of the plasma has a length along the first direction and a width along a second direction perpendicular to the first direction and parallel to the electrodes where the length is longer than the width;~~

~~placing a substrate between said first and second electrodes;~~

~~etching a surface over said substrate with said plasma, and~~

~~changing a relative location of the substrate with respect to the plasma in the second direction during the etching,~~

~~wherein a gap between said first and second electrodes is 30 mm or less~~

generating a plasma in a form of plane for depositing the diamond-like carbon film; and

forming the diamond-like carbon film on a magnetic layer formed over a substrate by a plasma chemical vapor deposition using the plasma.

43-86. (Canceled)

87. (New) The method for depositing a diamond-like carbon film according to

claim 42, wherein the plasma has a cross-section in parallel to said substrate at a ratio (length thereof)/(width thereof) of 10 or more.

88. (New) The method for depositing a diamond-like carbon film according to claim 42, wherein the magnetic layer comprises a material containing one or more selected from the group consisting of Fe, Ni, Co and Cr.

89. (New) A method for depositing a diamond-like carbon film comprising the steps of:

generating a plasma in a form of plane for depositing the diamond-like carbon film;

forming the diamond-like carbon film on a magnetic layer formed over a substrate by a plasma chemical vapor deposition using the plasma; and

moving the substrate while forming the diamond-like carbon film on the substrate in a direction perpendicular to the plane of the plasma.

90. (New) The method for depositing a diamond-like carbon film according to claim 89, wherein the plasma has a cross-section in parallel to said substrate at a ratio (length thereof)/(width thereof) of 10 or more.

91. (New) The method for depositing a diamond-like carbon film according to claim 89, wherein the magnetic layer comprises a material containing one or more selected from the group consisting of Fe, Ni, Co and Cr.

92. (New) A method for depositing a diamond-like carbon film comprising the steps of:

providing first and second electrodes opposed to each other in a vacuum vessel, the first electrode having a gas supply slit;

introducing a gas through the gas supply slit into the vacuum vessel;

generating a sheet-like beam-type plasma of the gas by applying a voltage between the first and second electrodes; and

forming the diamond-like carbon film on a magnetic layer formed over a substrate by a plasma chemical vapor deposition using the sheet-like beam-type plasma.

93. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein the gas comprises $Si(C_xH_{2x+1})_{4-y}H_y$ where x is an integer of 1 or more, and y is an integer from 0 to 3.

94. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein pressure in the vacuum vessel is in the range of from 0.1 to 800 Torr.

95. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein the sheet-like beam-type plasma has a cross-section in parallel to said substrate at a ratio (length thereof)/(width thereof) of 10 or more.

96. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein the gas supply slit has a ratio (length thereof)/(width thereof) of 5 or more.

97. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein at least one of a surface of the first and second electrodes is covered with an electrical insulator.

98. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein a gap between the first and second electrodes is 30 mm or less.

99. (New) The method for depositing a diamond-like carbon film according to claim 92, wherein the magnetic layer comprises a material containing one or more selected from the group consisting of Fe, Ni, Co and Cr.

100. (New) A method for depositing a diamond-like carbon film comprising the steps of:

providing first and second electrodes opposed to each other in a vacuum

vessel, the first electrode having at least one inlet having an opening elongated in a first direction;

introducing a gas through the gas supply slit into the vacuum vessel;

generating a sheet-like beam-type plasma of the gas by applying a voltage between the first and second electrodes; and

forming the diamond-like carbon film on a magnetic layer formed over a substrate by a plasma chemical vapor deposition using the sheet-like beam-type plasma,

wherein at each the at least one inlet the sheet-like beam-type plasma extends from the first electrode toward the second electrode.

101. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein the gas comprises $Si(C_xH_{2x+1})_{4-y}H_y$ where x is an integer of 1 or more, and y is an integer from 0 to 3.

102. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein pressure in the vacuum vessel is in the range of from 0.1 to 800 Torr.

103. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein the sheet-like beam-type plasma has a cross-section in parallel to said substrate at a ratio (length thereof)/(width thereof) of 10 or more.

104. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein at least one of a surface of the first and second electrodes is covered with an electrical insulator.

105. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein a gap between the first and second electrodes is 30 mm or less.

106. (New) The method for depositing a diamond-like carbon film according to claim 100, wherein the magnetic layer comprises a material containing one or more selected from the group consisting of Fe, Ni, Co and Cr.